

Borough of Ossett.

TWENTY-FIRST
ANNUAL REPORT

ON THE
SANITARY CONDITION OF OSSETT,

FOR THE YEAR

1894,

BY

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TO THE SANITARY AUTHORITY FOR
THE BOROUGH OF OSSETT.

GENTLEMEN,—Though the year 1894 will long be remembered as one of commercial depression, entailing loss on the majority and hardships and suffering to not a few; yet there is some satisfaction to be derived from the fact that from a sanitary aspect the year that has just closed has been one of the brightest in our experience—that the distress due to epidemics and widespread disease has not been added to the privations consequent upon small earnings and scarcity of work. The report now issued presents no features of special interest, and it is perhaps this very fact which renders it so satisfactory from a public health standpoint.

VITAL STATISTICS.

Population.—The population of the borough increases at a less rate than that generally accepted. A study of the returns for the last 10 or 12 years evinces the fact that emigration has considerably reduced the increase which is due to the excess of births over deaths. The loss due to emigration is however a factor very difficult to ascertain correctly, hence in order to estimate the number of the population I have followed the method adopted last year and have based my calculations on the number of inhabited houses. The number of the population estimated to the middle of the year was 11,152.

Births.—The births registered during the year 1894 were 317; of these 167 were males and 150 females. The percentage of illegitimate births has increased to 3.7. As bearing on the question of population the following brief summary may be of interest. Twenty years ago, in 1874, with a less population than now, there were 380 births in the year, and, though gradually decreasing, the annual number of births remained over 300 during the following decennium. From this time until 1892 the births remained below 300 a year (excepting 1889 when there were 312), and, although there has been a slight rise during the last three years, the number has never reached 320. So that, whereas the birth-rate in 1874 was 38 per 1,000 of the population, it has fallen to 28.4 in 1894. Whilst therefore the birth-rate in Ossett was above the average of the country twenty years ago, now it is below it. The birth-rate in England during 1893 was 31.9.

Deaths.—Though we have to deplore a lessened birth-rate, we have cause for congratulation in a lessened death-rate also. From all causes and at all ages the deaths during the year numbered 173, (males 93 and females 80), the rate per 1,000 of the population being 15.5. Infantile deaths numbered 45 or nearly one-fourth of the whole. Thirty-nine individuals died at ages over 65 years, and their average length of life was 76.27 years. A decrease in the number of deaths as compared with 1893 is to be observed at each age period. The infantile death-rate has fallen from 171 to 141; this compares favourably with the last published return of the Registrar-General, in which the infant mortality of the country is stated to be 159. The deaths among children under 5 years of age still, however, bear too large a ratio to the deaths from all causes.

TABLE I.

Showing the Population, Inhabited Houses, Births, and Deaths for the year 1894 and 10 years preceding.

Year.	Estimated population.	Number of inhabited houses.	Registered Births.		Registered Deaths.		
			Males.	Females.	Total at all ages.	Under 1 year.	Under 5 years.
1894	11,152	2534	167	150	173	45	71
1884	11,314		162	145	193	39	64
1885	11,396		126	136	190	44	90
1886	11,506		135	140	165	32	64
1887	11,568		133	145	216	52	84
1888	11,671		167	139	183	37	55
1889	11,847	2570	138	184	166	43	66
1890	11,900		148	150	245	48	87
1891	10,984	2483	161	136	217	55	75
1892	11,100	2527	171	148	181	45	60
1893	11,118		157	158	223	54	92

TABLE II.

Death Rates per 1000 of the Population from various Diseases, compared with the Rates in England and Wales.

	All causes.	Smallpox.	Measles.	Scarlatina.	Diphtheria (including Membranous Croup).	Whooping Cough.	Enteric Fever.	Diarrhoea.	Zymotic rate.	Phthisis.	Respiratory diseases.	Cancer.
OSSETT.	15.5	.08	.08	.00	.71	.35	.00	.17	1.52	1.34	3.12	.80
ENGLAND 1893.	19.17	.04	.37	.23	.31	.34	.22	.99	3.16	1.46	3.53	.71

TABLE III.

Annual Birth-rate, Illegitimate Birth-rate, Death-rate,
and Death-rate of Children for the year 1894
and ten years preceding.

Years.	Birth-rate per 1000 of the population	Death-rate per 1000 of the population	Illegitimate birth-rate per 1000 of registered births.	Deaths of children under 1 year per 1000 births.	Deaths of children under 1 year per 1000 total deaths.	Deaths of children under 5 years, per 1000 total deaths.
1894	28.42	15.5	37.85	141.9	260	410
1884	27.1	17.09		127.	202	331
1885	23.07	16.7		167.9	231	473
1886	23.9	14.3		116.4	193	327
1887	24.03	18.7		187.	240	342
1888	26.2	15.7		120.9	202	300
1889	27.18	14.1	43.4	133.5	259	397
1890	27.09	20.4		161.	195	355
1891	27.03	19.9		185.	253	345
1892	28.74	16.3	18.8	143.	243	331
1893	28.33	20.05	19.04	171.4	242	412

Deaths from diphtheria and cancer are above the general average, whilst phthisis and respiratory diseases furnish death-rates below the average.

The zymotic death-rate being largely influenced by epidemics, is liable to considerable fluctuation, and should never be relied on alone, as furnishing a criterion of the health of a community. It is gratifying none the less to find it less than half that of England and Wales. And this, taken in conjunction with a low mortality from all causes, and an infant mortality below the average, gives reliable ground for the statement, already made, that the year 1894 has been one of the best through which we have yet lived. Comparative figures are given in Table II.

INFECTIOUS DISEASE.

No year, since the adoption of the Infectious Diseases Notification Act of 1889, has been so free from disease of this class as the past one. In January two cases of smallpox (father and son) were discovered; the latter a boy, aged 2 years, was reported to be suffering from the disease on January 17th and was removed to the hospital the same day. The disease was of a severely confluent type, and the child succumbed on the sixth day after his admission to the hospital. He was unvaccinated. On the 30th of the same month the father, who was found to be in an advanced stage of the disease, was removed to hospital. His was a mild case and he made a rapid recovery. One other case of smallpox, received from Horbury, was treated in the Storrs-hill hospital. This, in a well vaccinated subject, ran a favourable course.

A single case of membranous croup occurred in March, and during May, June, July, and August ten other cases of membranous croup or diphtheria

were reported. They were widely distributed over the district, and, except in the case of two residing near to one another, there does not appear to have been any communication between the houses attacked. Of the eleven cases, 8 proved fatal. It is remarkable, considering the very infectious nature of the disease and the severity of the cases, that the outbreak was so limited.

Scarlatina has been restricted to 12 cases, all of which recovered. It is now more than two years since we had a fatal case of scarlatina in the borough. Sixteen cases of erysipelas and three of typhoid fever were notified. This comprises the list of infectious disease reported during the year; but, among diseases not in the notification schedule, whooping cough must be mentioned as being somewhat prevalent during the second quarter, and 4 deaths are attributed to this malady. Diarrhœa on the other hand has been less conspicuous than usual, and only two deaths are registered under this heading. In July, at the request of the Sanitary Committee, I drew up a circular setting forth the precautions recommended for the prevention of diarrhœa, and this was published. It may be that the advice thus given was acted upon by some, but I am inclined to give the credit of the lessened prevalence of diarrhœa to the combined influence of low earth temperatures and saturation of the soil during the latter part of July and August.



TABLE IV.
Classification of Deaths according to Diseases and
Age Periods.

Cause of Death.	Under 1 Year.	1 to 5	5 to 15	15 to 25	25 to 65	65 and over.	Total under 5	Total
CLASSES.								
I. Zymotic Diseases ...	6	8	2				14	16
II. Constitutional Diseases	1	8	3	7	17	1	9	37
III. Local Diseases ...	16	10	4		29	23	26	82
IV. Developmental Diseases	10					14	10	24
V. Violent Deaths ...					1	1		2
VI. Ill-defined Causes ...	12						12	12
Total ...	45	26	9	7	47	39	71	173
I. Zymotic Diseases :—								
ORDER I.—MIASMATIC DISEASES—								
Smallpox ...		1					1	1
Diphtheria ...		2					2	2
Membranous Croup ...		4	2				4	6
Measles ...	1						1	1
Whooping Cough ...	3	1					4	4
ORDER II.—Diarrhoeal Diseases—Diarrhoea ...								
	2						2	2
II. Constitutional Diseases :—								
ORDER I.—DIATHETIC DISEASES—								
Malignant Disease ...					8	1		9
Rickets ...		1					1	1
Pernicious Anæmia ...					1			1
ORDER II.—TUBERCULAR—								
Phthisis ...		3	2	4	6		3	15
Tubercular Meningitis ...		1	1	1			1	3
Tabes Mesenterica ...		2					2	2
Other Forms of Tuberculosis ...	1	1		2	2		2	6
III. Local Diseases :—								
ORDER I.—NERVOUS SYSTEM—								
Inflammation of Brain			2					2
Apoplexy ...					5	5		10
Cerebral Softening ...						2		2
Myelitis ...					1			1
Laryngienus Stridulus ...		1					1	1
Convulsions ...	5						5	5

TABLE IV (CONTINUED).

**Classification of Deaths according to Diseases and
Age Periods.**

Cause of Death.	Under 1 Year.	1 to 5	5 to 15	15 to 25	25 to 65	65 and over.	Total under 5	Total
ORDER II.—CIRCULATORY SYSTEM—								
Valvular Disease of Heart			1		5	2		8
Senile Gangrene ...					1	1		2
ORDER III.—RESPIRATORY SYSTEM—								
Bronchitis ...	3	2			7	8	5	20
Pneumonia ...	7	4	1		2	1	11	15
ORDER IV.—DIGESTIVE SYSTEM—								
Dentition ...		2					2	2
Hæmatemesis ...						1		1
Dyspepsia ...					1			1
Peritonitis ..					1			1
Enteritis ...	1	1					2	2
Intestinal Obstruction ...					1	1		2
Strangulated Hernia ...					1			1
ORDER V.—URINARY SYSTEM—								
Acute Nephritis ...					1			1
Bright's Disease ...					2	2		4
ORDER VI.—DISEASES OF BONES AND JOINTS—								
Caries of Spine ...					1			1
IV. Developmental Diseases :—								
Premature Birth ...	3						3	3
Atelectasis ...	1						1	1
Spina Bifida ...	1						1	1
Other Congenital Defects ...	5						5	5
Old Age ...						14		14
V. Violent Deaths :—								
ACCIDENT—								
Machinery ...					1			1
Fall ...						1		1
VI. Ill-defined Causes :—								
Debility, Atrophy, and Inanition ...	11						11	11
Hæmorrhage ...	1						1	1

SUMMARY OF TABLE IV.

I.—ZYMOTIC DISEASES :—

1. Miasmatic Diseases	..	..	..	..	14
2. Diarrhœal Diseases	..	..	..	..	2

II.—CONSTITUTIONAL DISEASES :—

1. Diathetic Diseases	..	..	..	..	11
2. Tubercular Diseases	..	..	..	..	26

III.—LOCAL DISEASES :—

1. Nervous System ..	..	..	..	..	21
2. Circulatory System	..	..	..	..	10
3. Respiratory System	..	..	..	..	35
4. Digestive System	10
5. Urinary System	5
6. Osseous System	1

IV.—DEVELOPMENTAL DISEASES ..

..	24
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V.—VIOLENT DEATHS :—

1. Accident..	2
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VI.—Ill-defined and Not Specified Causes ..

..	..	12
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TABLE OF DEATHS

during the Year 1894, classified according to DISEASES, AGES, and LOCALITIES.

LOCALITIES.	Mortality from all causes at subjoined ages.							Mortality from subjoined causes, distinguishing deaths of children under five years of age.													
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Under 5	Smallpox.	Diphtheria.	Membranous Group.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Phtthis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	TOTALS.	
NORTH WARD ..	49	14	10	1	4	11	9	Under 5		2	1		1	1	2	6				11	24
								5 upwards.							3	5	1	1		15	25
CENTRAL WARD	34	11	5	2	—	9	7	Under 5			1		1	1		3				10	16
								5 upwards.			1				2	4	2			9	18
EAST WARD ..	52	14	7	3	2	14	12	Under 5				1	2		1	6				11	21
								5 upwards.			1				6	5	3	1		15	31
WEST WARD ..	38	6	4	3	1	13	11	Under 5	1		2					1				6	10
								5 upwards.							1	5	1			21	28
TOTALS ..	173	45	26	9	7	47	39	Under 5	1	2	4	1	4	2	3	16				38	71
								5 upwards.			2				12	19	7	2		60	102

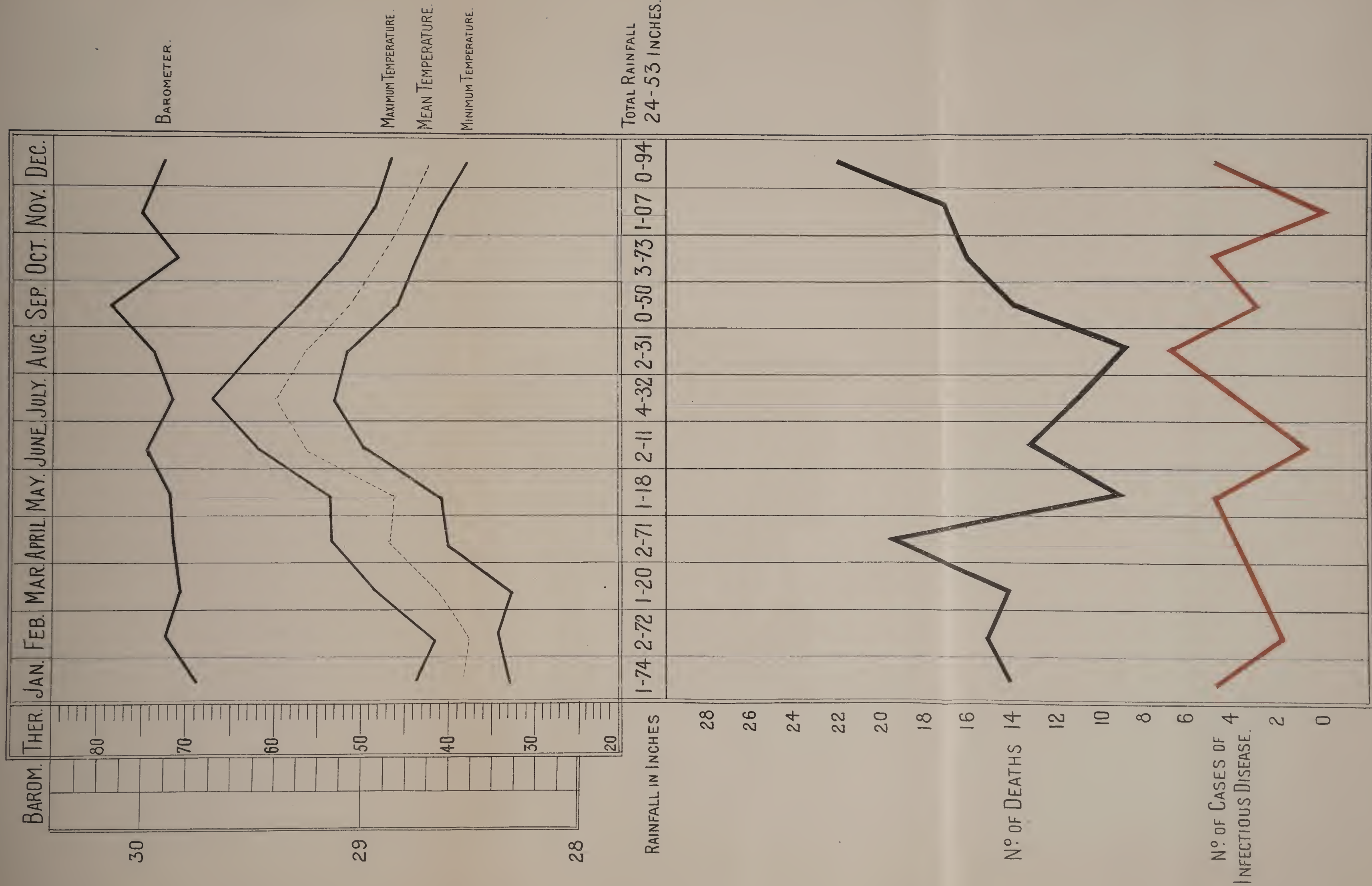
METEOROLOGY.

The year 1894 was neither so warm nor so dry as its predecessor. The warmest weather was experienced in July, the mean temperature being 60 degrees Fah. The greatest amount of rain (4.32 inches) fell during this month. The mean temperature of August fell to 56 degrees, being 6.5 degrees below the mean temperature of the previous August. Reference has been made to these conditions when treating of the subject of diarrhœa. The highest shade temperature (84 degrees) was registered on June 28th, the only day in the year on which the temperature was above 78 degrees. Barometric pressure was lowest in January and highest in September. Rainfall during the year amounted to 24.53 inches, being $4\frac{1}{2}$ inches in excess of the amount in 1893. The two curves on the chart indicate the number of deaths and the recorded cases of zymotic disease during each month.

SEWAGE DISPOSAL.

The necessity of improving the eastern outfall sewage works has long been a pressing one. The expenditure of time and money in recent alterations has proved utterly futile, as indeed was to be expected from the very nature of the plan adopted, complying as it did with no recognised form of sewage treatment, and at variance with all the requirements of the Local Government Board. Wiser counsels have at length prevailed, and the matter has been put into the hands of Mr. Paterson to enlarge and remodel the original scheme of precipitation and land filtration constructed by him in 1874, so as to provide for the greatly increased volume of sewage (305,000 gallons per day) with a margin for the possible requirements of the next 25 years. The original scheme,

COMPARISON OF METEOROLOGICAL CONDITIONS WITH MONTHLY DEATHS & CASES OF INFECTIOUS DISEASE.



NOTE: THE BAROMETER READINGS ARE CORRECTED TO 32° F & REDUCED TO SEA LEVEL.

constructed to treat 100,000 gallons per day, was undoubtedly a good and complete one of its kind, but it has failed from two causes, viz., the increase of the requirements beyond the capabilities of the works, and in earlier years from the want of proper attention. It has been wisely decided to entrust to Mr. Paterson the rectification of the first named cause of failure, and it will ever remain the duty of the Sanitary Authority to prevent a repetition of the second. The treatment of sewage such as ours, containing as it does a very high percentage of trade refuse, must of necessity be a costly and unremunerative undertaking, but money spent on the construction and maintenance of works of sewage disposal will be well invested, if thereby our rivers may once more become the bright and purifying streams they once were. Sanitary administrators should be ambitious of being in the van of such progress, and if public bodies do their duty in preventing the pollution of rivers there can be little doubt but that individuals will be compelled to do theirs.

The drainage of Gawthorpe and that part of the Street-side unconnected with the existing sewerage system has lately been under consideration. A very long and costly main sewer would be required to connect this district with the general system, if indeed this could be done at all, and the alternative of establishing a third sewage works with precipitation tanks and filter beds is undesirable. If either of these expedients were adopted a very considerable expense would be incurred. I am inclined to the opinion that the most economical and from all points of view the best solution of the problem is to be found in the adoption of a policy similar to that observed in regard to the drainage of the Spa, namely, an arrangement with the adjoining sanitary authority, whose main sewers lie in close proximity to the undrained area

in question, and towards which the natural drainage of the district tends. The whole of the district might I believe be thus dealt with, except the lower part of Gawthorpe. The sewage of this small area, being comparatively small in amount and entirely free from trade refuse, could be carried by gravitation to the adjacent agricultural land, and there be disposed of by subsoil irrigation, a method of treatment successfully employed in the case of villages and small communities. I am not in a position to form an estimate of the relative cost of the plan suggested as compared with others which have been proposed, the question being one for the consideration of an expert.

SCAVENGING.

During the last few years the scavenging of the district has been carried out with regularity and method, reflecting credit upon the sanitary inspector and his staff, and with such satisfaction to the general public that complaints were rarely made. I regret therefore that a change has been made in the arrangements and the work delegated to contractors, although with the laudable object of effecting a pecuniary saving. The small saving, however, sinks into insignificance when it is attended with inefficiency and inconvenience, if not grave nuisance, to the inhabitants. Bitter complaints are heard on all sides of long neglected ashpits, and attention to them has thrown more work upon the inspector than was the case when the scavenging was under his own direct management. I do not see that the proposal to appoint a sub-inspector for this work if adopted would much improve matters, and I fail to see where any saving would be effected in the long run. An early return to the well-approved system of past years would, I feel sure, prove to be the most satisfactory

solution of the present difficulty, as well as the most economical. Economy in small matters is not always fraught with corresponding advantages to those who practise it. After all efficiency is the object to be attained, and in the matter under consideration the public good ought to be regarded as more worthy of striving after than doubtful saving of the public purse. The sanitary authority should remember that, having undertaken to remove refuse, they are subject to the provisions of section 43 of the Public Health Act, and, equally with individuals, become liable to a penalty for neglect of their duty.

SANITARY CONVENIENCES.

Steady improvement has been made during the year in the structure of privies and ashpits. Thirty-seven notices have been served for the erection of new privies to supplant old and dilapidated structures, of which 28 have already been complied with. There is still work of this kind to be accomplished, and many houses provided with sanitary conveniences in common lack sufficient accommodation. The example of the Gawthorpe Church School authorities, who have built trough closets, is worthy of a large following. This form of closet is eminently suitable for schools, workshops, and blocks of houses where conveniences are used in common, especially where the waste water from sinks, &c., can be utilised as the water supply. Very simple automatic flushing arrangements can be added, which nothing short of wilful destruction can render inactive.

Trough closets of this character could be constructed at little more than the cost of the present privies, and would be a great improvement upon the present unsightly and often offensive buildings. It is always a difficult matter to get out of a beaten

track, yet I venture to believe that many intending builders would be easily persuaded to adopt trough closets, did they but see their advantages. To such I would recommend a visit of inspection to the Gawthorpe schools.

DAIRIES AND COWSHEDS.

Last year I endeavoured to find out whether any regulations existed under the Dairies, Cowsheds, and Milk Shops Order; but no one seemed to have any knowledge of the matter. Accidentally however, in looking through an accumulation of papers, I found a copy of the regulations made in September, 1887, by the then Local Board, relating to the lighting, ventilation, cleansing, drainage, and water supply of cowsheds. These regulations were supposed to come into force on the 1st of the following November, but so far as I have been able to ascertain all action in the matter ceased from that day forward. It is high time that the subject received some attention from the sanitary authority. A visit paid to some of the cowsheds in Ossett would furnish ample proof of the wisdom of the regulations, at the same time demonstrating the filth and disorder which the neglect of them engenders. With few exceptions the cowsheds in the borough are ill-ventilated, and badly lighted, some of them are filthy, and the majority afford much too small a space for the number of animals housed.

According to Dr. Ballard not less than 1000 cubic feet should be allowed for each animal, and a floor-space of 100 to 120 square feet would probably be sufficient. The ventilation of cowsheds is a much simpler problem than the ventilation of dwelling houses, and, considering the great amount of disease which is known to exist amongst stalled animals, it is a matter of the greatest importance

that overcrowding should be prevented. The sanitary condition of dairies and cowsheds, and indeed all appliances for the collection and distribution of milk, as well as the health of the animals themselves, should be beyond reproach. It is to be hoped that the sanitary conscience of the authority may ere long be awakened to the grave danger to the public health which the present order of things involves.

BURIAL GROUNDS.

The rapidly decreasing space available for burial in our churchyards and burial grounds will inevitably ere long force upon the attention of the Sanitary Authority the necessity of providing a public cemetery. The South Ossett Churchyard has been closed, and the Green burial ground requires to be dealt with in a similar manner. Some members of the Authority have during the past year witnessed abuses here which would not have been possible, except under penalty, had the model bye-laws relating to burial been in force, and which call for prompt action on the part of the Authority. The burial ground in connection with the Wesleyan Chapel on the Common was extended a few years ago, but a glance at it now suffices to show how rapidly the new ground is becoming filled up. A few years hence a cemetery will have to be made, and it seems to me that a not unpromising site might be found on the ridge of high land to the north of the Dewsbury and Wakefield high road. Before dismissing this subject may I be permitted to give expression to a long-felt regret that the aspect of our places of sepulchre is so unworthy. Their neglected appearance is a dishonour, and conveys anything but the idea of the respect which we should desire to render to the memory of those whose places we now fill. Let the memory of our dear ones, who

have departed from amongst us, be ever green, and let their last resting place bear evidence to the fact. With the provision of a cemetery we may expect to have a mortuary also, the want of which was pointed out by Dr. Thorne Thorne in a report on the sanitary condition of the district in 1878.

NEW STREETS AND BUILDINGS.

The opening out of new streets and the improvement of existing ones have done much to improve the general appearance of the borough. Old and dilapidated structures have been pulled down to make place for a better class of buildings. The construction of Station-road has notably tended in this direction, and the widening of Prospect-road has materially improved the Town-end.

During the year, 46 new dwelling-houses, 2 schools, and 9 other new buildings have been erected. The chief fault to be found with the class of houses occupied by working people is the lack of sufficient bedroom accommodation. The majority of such houses have only one room upstairs, and, when two are to be found, one is usually a very small apartment hardly worthy of the name of bedroom. Builders might avail themselves of the space in the roof to construct attic bedrooms, which would in many cases be a valuable addition to the sleeping accommodation. Working people are themselves much to blame on account of their reluctance to pay a slight increase in rent for the luxury of better accommodation and healthier homes. The actual amount of the rent in pounds, shillings and pence should not be the only economic consideration. Houses may be found which are cheap at a rental above that generally paid, whilst others are bad investments at any price. Most of the main roads have been kept in a fair state of repair. Healey-road, however, has not received as much attention as the heavy traffic upon it renders necessary, hence the surface has in many places become much broken up. No word of commendation can yet be spoken on behalf of the private streets. All that has been said in previous reports concerning them holds good to-day.

SANITARY INSPECTOR'S REPORT.

Nuisances.

Remaining over from 1893	..	..	..	32
Reported during 1894	..	..	..	29
Abated during 1894	..	..	..	16
Unabated at close of 1894	..	..	..	13

Buildings.

New dwelling-houses erected	..	..	..	46
Alterations	..	..	..	..
Other buildings erected	..	..	..	11

Results of Inspection.

Orders issued for Sanitary amendment of premises	..	..	..	..	1
Houses cleansed, repaired, &c.	..	..	..	..	2
Houses disinfected	..	..	..	..	1
Houses condemned unfit for habitation	..	..	..	..	0

House Drains.

Repaired, trapped, &c.	..	..	..	..
New provided	..	..	..	..

Privies and W.C.'s.

Repaired	..	..	..	..	..
New provided	..	..	..	..	28

Ashpits.

Repaired, covered and improved	..	..
New provided	..	28

Sewerage and Scavenging.

New sewers (number of yards)	..	..	269
Loads of night-soil removed	..	..	..
Filth accumulations removed	..	..	2
Ditches, &c., cleansed	..	..	2
Slaughter-houses inspected	..	..	14

The Sanitary Inspector's report shows activity in the suppression of nuisances. Including those remaining over from last year, 48 nuisances, mostly relating to defective privies, have been abated, and 13 of those reported during the year remain to be dealt with. Two houses have been cleansed and whitewashed by order of the Sanitary Authority, and in several instances filthy conditions have received the required attention. I regret that no action has been taken to abate the smoke nuisance. A new sewer has been laid in Spa-lane and connected with the Horbury sewerage system.

Slaughter-houses have been regularly inspected, and on the whole these have been found in a satisfactory condition. In one instance however gross contravention of the bye-laws was observed. Offal and filth were found lying about outside a slaughter-house, causing a grave nuisance. Prompt action was taken and the offence was not repeated. Measures might with advantage be taken to secure greater cleanliness of yards and open spaces about buildings.

In conclusion I would express the hope that the street improvements, so long contemplated, may not be unnecessarily delayed, since the execution of public works of this description is calculated to find employment for many willing workers at present suffering from enforced idleness.

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